

REMARKS

Claims 1-5 are pending in this Application. By this Amendment, claims 1 and 5 have been amended to recite that the semicrystalline random copolymers are prepared by polymerization in the presence of Ziegler-Natta catalysts, support for which can be found at page 4, lines 7-8. Claims 6-10 are new. Claims 6 and 7 recite lower limits of the molecular weight distribution of greater than 5 and 6, respectively, support for which can be found in Example 1 of Table 1. Applicants respectively submit that one skilled in the art would consider the claimed range inherently supported by the discussion in the disclosure, *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Support for claim 8 can be found at page 2, lines 22-25, support for claim 9 can be found at page 2, line 11, and support for claim 10 can be found at page 3, lines 8-27. Applicants respectfully request that the Examiner address the patentability of each of the new claims 6-10 in the next Office Action.

Claim Rejections

Rejections Under 35 U.S.C. § 102/103

A. Response to rejection of claims 1, 2, 3, and 5 under 35 U.S.C. 102(b) as being anticipated by Stahl et al.

In response to the rejection of claims 1, 2, 3, and 5 under 35 U.S.C. 102(b) as being anticipated by International Publication Number WO 95/32091 of Stahl et al. ("Stahl"), Applicants have amended the claims to more particularly point out and distinctly claim that the semicrystalline random copolymers are prepared by polymerization in the presence of Ziegler-Natta catalysts.

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Stahl clearly does not teach fibres or nonwoven fabrics made from fibres as recited in the current claims, in view of the currently recited feature where the fibres/fabrics comprise polymer material made from Ziegler Natta (“ZN”) catalysts. In fact, Stahl specifically discourages (teaches away from) the use of polymers made from ZN catalysts.

However, in many fiber, fabric, or similar product applications, conventional (for purposes of this application, conventional will mean Ziegler-Natta catalyzed propylene homopolymers and copolymers) polyolefins have melting points which prevent or substantially limit their use in applications where lower melting points or larger melting point temperature differences would be of advantage. (page 1, lines 20-25, emphasis added)

With respect to new claims 6-10, Stahl clearly does not teach the molecular weight distribution ranges of claims 6 and 7, the melting point limitation of claim 9, or the polymers of claims 8 and 10.

Reconsideration and withdrawal of the Rejection respectfully is requested.

B. Response to rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Stahl in view of Zucchelli.

In response to the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Stahl in view of U.S. Patent Publication No. 2003/0130436 of Zucchelli (“Zucchelli”), Applicants respectfully submit that a *prima facie* case of Obviousness has not been made out, and traverse the rejection.

With respect to a rejection under 103(a), the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. See MPEP §2143. Finally, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (C.C.P.A. 1974).

The deficiencies of Stahl have been discussed in paragraph A above. Zucchelli does not remedy the deficiencies of Stahl, and actually teaches away from combination with Stahl. In fact, modification of Stahl and Zucchelli as suggested by the Examiner would render them unsuitable for their intended purposes.

Zucchelli relates to dispersions of one or more additives to be used in the processing of olefin polymers or copolymers, where the dispersion comprises nonextruded particles of olefin polymers containing at least two immiscible polyolefinic phases. These are very different materials than those described in Stahl. Stahl's materials do not contain immiscible polyolefinic phases, and Zucchelli's preferred olefin polymer contains a high ethylene fraction C which is a

copolymer fraction of ethylene and (i) propylene or (ii) another $\text{CH}_2=\text{CHR}$ α -olefin, where R is a 2-8 carbon alkyl radical, or (iii) a combination thereof, optionally with minor amounts of a diene (such as butadiene, 1,4-hexadiene, 1,5-hexadiene, ethylidene-norbornene), containing from 20 to 80% by weight, preferably 25-75%, more preferably 25-70% by weight of ethylene, (page 3, paragraph [0054], emphasis added)

In addition, Tables 1-4 show Zucchelli's final compositions containing non- C_3 co-monomers in quantities of 20-72 wt%. However, Stahl specifically warns against use of materials containing non- C_3 co-monomers at far lower levels.

processes and catalysts can usefully incorporate alpha-olefin comonomers into propylene copolymers in the range of from 0.2 mole percent to 6 mole percent, based on the total moles in the copolymers. Above 6 mole percent the resulting resin will make a fiber oriented film with a melting point too low for many preferred applications (page 7, lines 24-28, emphasis added)

Therefore Stahl and Zucchelli teach away from their combination, and the modifications suggested by the Examiner would actually render them unsuitable for their intended purpose. Reconsideration and withdrawal of the Rejection respectfully is requested.

C. Response to rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Stahl in view of Sartori et al.

In response to the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Stahl in view of International Publication Number WO 00/63471 of Sartori et al. ("Sartori"), Applicants respectfully submit that a *prima facie* case of Obviousness has not been made out, and traverse the rejection.

The deficiencies of Stahl have been discussed in paragraph A above. Sartori does not remedy the deficiencies of Stahl, and actually teaches away from combination with Stahl. In fact, modification of Stahl and Sartori as suggested by the Examiner would render Stahl unsuitable for its intended purpose.

The Examiner points to Sartori's polyolefin (B), as disclosing Applicants' component (B), however the Examiner has not addressed: first, that Sartori's material is a Ziegler-Natta produced material, where Stahl specifically discourages (teaches away from) the use of such material.

However, in many fiber, fabric, or similar product applications, conventional (for purposes of this application, conventional will mean Ziegler-Natta catalyzed propylene homopolymers and copolymers) polyolefins have melting points which prevent or substantially limit their use in applications where lower melting points or larger melting point temperature differences would be of advantage. (page 1, lines 20-25, emphasis added)

Second, there would be no predictability in the incorporation of Sartori's polyolefin (B) in Stahl's composition because, as described above, many of Sartori's preferred materials for polyolefin (B) contain levels of non-C₃ comonomers in excess of Stahl's 6 mole percent limit, e.g., homopolymers and copolymers of ethylene, like HDPE, LDPE, and LLDPE, copolymers of propylene with ethylene and or C₄-C₁₀ α -olefins, where the total of the comonomer ranges from 0.05 to 20% by weight, elastomeric copolymers of ethylene with propylene and/or a C₄-C₁₀ α -olefin, or 1-butene homopolymers or copolymers with ethylene and/or other α -olefins. (page 5, line 28 to page 6, line 15)

Therefore, for all the above reasons, Applicants respectfully submit that a *prima facie* case of Obviousness has not been made out. However, even if a *prima facie* case had been made out, Applicants have shown in Table 2 of the specification unexpected results to overcome such a

case, where fibres made according to the current claims exhibit a broader spinning temperature window and both high values of elongation at break and high values of tenacity relative to fibres prepared with commercial polymers.

Reconsideration and withdrawal of the Rejection respectfully is requested.

Double Patenting Rejections

D. Response to provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/629,764.

In response to the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/629,764, Applicants have included with this Response a Terminal Disclaimer.

Reconsideration and withdrawal of the Rejection respectfully is requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicant's attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

This is intended to be a complete response to the Office Action mailed December 24, 2008.

Respectfully submitted,



William R. Reid
Registration No. 47,894
Attorney for Applicant

I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 24, 2009.



March 24, 2009

Date of Signature

Basell USA Inc.
Delaware Corporate Center II
2 Righter Parkway, Suite 300
Wilmington, DE 19803 USA
Attorney's Telephone No.: 302-683-8178
Attorney's Fax No.: 302-731-6408